

On-Farm Beef Finishing Planning Budget

Beef cattle producers raising calves from birth to finish may use this planning budget to estimate their costs and returns in 2025. Table 1 presents estimates for the costs and returns associated with raising and finishing calves born in spring- and fall-calving herds, based on price forecasts as of October 2024. Detailed assumptions and feed requirements for systems starting with each calving season are summarized in Tables 2 through 5.

The production practices used to develop these estimates assume a 50-cow herd with purchased replacements, drylot backgrounding for spring calves and pasture backgrounding for fall calves, and grain-based finishing using self-feeders. Finishing weight is roughly 1,400 pounds and animals are sold by live weight. Animals are 520 days of age at slaughter.

Table 1. Missouri on-farm beef finishing planning budget for 2025.

	Fall calving		Spring calving	
	Dollars per animal sold ¹	Dollars per live pound	Dollars per animal sold ¹	Dollars per live pound
Income				
Live cattle sales	2,580.60		2,594.40	
Culled breeding stock	213.88		244.55	
Total income	2,794.48	2.02	2,838.95	2.01
Operating costs				
Cow herd feed	678.53	0.49	688.90	0.49
Backgrounding feed	90.07	0.07	149.05	0.11
Finishing feed	413.97	0.30	408.01	0.29
Labor	250.00	0.18	276.35	0.20
Veterinary and drugs	57.01	0.04	60.03	0.04
Machinery and utilities	321.88	0.23	365.60	0.26
Livestock facility repairs	16.22	0.01	25.15	0.02
Cow and bull replacement	481.40	0.35	571.09	0.40
Marketing and professional fees	73.02	0.06	74.17	0.06
Miscellaneous	11.00	0.01	11.00	0.01
Operating interest	132.11	0.10	145.15	0.10
Total operating costs	2,525.20	1.83	2,774.50	1.97
Ownership costs				
Depreciation on facilities and equipment	14.52	0.01	18.64	0.01
Interest on capital assets	228.91	0.17	233.86	0.17
Insurance and taxes on capital assets	57.79	0.04	61.04	0.04
Total ownership costs	301.22	0.22	313.55	0.22
Total costs	2,826.42	2.05	3,088.05	2.19
Income over operating costs	269.27	0.20	64.45	0.05
Income over total costs	-31.95	-0.02	-249.10	-0.18

^{1.} Totals may not sum due to rounding.

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Table 2. Assumptions in Missouri on-farm beef finishing planning budget (fall calving, pasture backgrounding, grain finishing).

Description	Value	Description	Value
Live cattle price, dollars per hundredweight	187.00	Cows in herd	50
Cull cow price, dollars per hundredweight	123.00	Bulls in herd	2
Days to weaning	210	Weaning weight, pounds	590
Days backgrounded	120	Backgrounded weight, pounds	810
Days on feed	190	Finished weight, pounds	1,380
Replacement heifer value, dollars per head	3,000	Marketing fee, percent of sales	2.5
Replacement rate, percent of cow herd	13.0	Operating interest, percent APR	7.75
Labor, hours per head	11.5	Labor cost, dollars per hour	19.8

Table 3. Assumptions in Missouri on-farm beef finishing planning budget (spring calving, drylot backgrounding, grain finishing).

Description	Value	Description	Value
Live cattle price, dollars per hundredweight	184.00	Cows in herd	50
Cull cow price, dollars per hundredweight	123.00	Bulls in herd	2
Days to weaning	210	Weaning weight, pounds	570
Days backgrounded	120	Backgrounded weight, pounds	840
Days on feed	190	Finished weight, pounds	1,410
Replacement heifer value, dollars per head	3,000	Marketing fee, percent of sales	2.5
Replacement rate, percent of cow herd	15.0	Operating interest, percent APR	7.75
Labor, hours	12.5	Labor cost, dollars per hour	19.80

Table 4. Feed assumptions per animal sold in Missouri on-farm finishing planning budget (fall calving, pasture backgrounding, grain finishing system).

Feed description	Stages used	Pricing unit	Price per unit	Total pounds	Feed cost, dollars¹
Pasture	Cow-calf, backgrounding	AUM	20.00		269.04
Mixed hay	Cow-calf, finishing	tons	115.00	6,556	376.97
Shelled corn	Finishing	bushels	4.70	3,230	271.09
Dried distillers grain	All stages	tons	180.00	1,678	151.04
Salt and mineral	All stages	tons	1,200.00	180	107.99
Limestone	Backgrounding, finishing	tons	200.00	64	6.44
Total				11,709²	1,182.56

^{1.} Totals may not sum due to rounding.

^{2.} Weight of grazed forage is not included. Consumption of 13.5 AUM totalling roughly 10,530 pounds of dry matter is assumed in this system.

Table 5. Feed assumptions per animal sold in Missouri on-farm finishing planning budget (spring calving, drylot backgrounding, grain finishing).

Feed description	Stages used	Pricing unit	Price per unit	Total pounds	Feed cost, dollars¹
Pasture	Cow-calf	AUM	20.00		309.35
Mixed hay	All stages	tons	115.00	7,016	403.40
Shelled corn	Backgrounding, finishing	bushels	4.70	3,729	313.00
Dried distillers grain	All stages	tons	180.00	1,279	115.13
Salt and mineral	All stages	tons	1,200.00	166	99.32
Limestone	Backgrounding, finishing	tons	200.00	58	5.75
Total				12,248²	1,245.95

^{1.} Totals may not sum due to rounding.

Returns to on-farm finishing

Producers considering finishing beef strictly for direct-to-consumer freezer beef should understand how production scale affects their decisions. The finishing costs in this model reflect a small-scale feedlot that buys, mixes and processes raw feed inputs into an incomplete ration fed through self-feeders. The balance of the ration (roughage) is fed through free-choice hay. This business model depends on the cost of gain being lower than the opportunity cost of selling the calves at weaning. For example, a 550-pound calf selling for \$250 per hundredweight is more profitable than a 1,400-pound steer selling for \$180 per hundredweight when the cost of gain is more than \$1.35 per pound.

Economies of scale are important in the cattle finishing business. Small operators may be better suited to buying feed premixed rather than mixing it on the farm. Similarly, larger operations than the one described will have the scale to justify the equipment and facilities necessary to handle wet feed ingredients that can sometimes be produced or obtained at a lower cost. The costs and returns experienced on an individual operation can vary widely from what is described in this budget.

Other resources

Use the resources below to customize on-farm finishing budgets for your operation, explore marketing opportunities or see other beef cattle budgets from University of Missouri Extension.

- Missouri Beef On-Farm Finishing Budget for Fall Calving (XLSX) (extension.missouri .edu/media/wysiwyg/Extensiondata/Pro/AgBusinessPolicyExtension/Docs/on-farm-finishing-budget-fall-calves.xlsx)
- Missouri Beef On-Farm-Finishing Budget for Spring Calving (XLSX) (extension.missouri .edu/media/wysiwyg/Extensiondata/Pro /AgBusinessPolicyExtension/Docs/on-farm -finishing-budget-spring-calves.xlsx)
- Evaluating Marketing Opportunities for Local Beef in Missouri (extension.missouri.edu/publications /g204) showcases opportunities to market beef raised and finished on-farm directly to consumers as either freezer beef (wholes, halves and quarters) or as retail cuts.
- Other beef cattle budgets and related information can be found on the <u>Beef Extension publications</u> <u>page</u> (extension.missouri.edu/programs/beef -extension/publications).



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^{2.} Weight of grazed forage is not included. Consumption of 15.5 AUM totalling roughly 12,090 pounds of dry matter is assumed in this system.